

CLAIMS

What is claimed is:

- 1 1. A network comprising:
 - 2 a server computer; and
 - 3 a client computer, wherein the client computer accesses an authentication stack
 - 4 during a power on self-test (POST) that enables authentication of the remote server.
- 1 2. The network of claim 1 wherein the authentication stack comprises:
 - 2 a control layer;
 - 3 an interface layer;
 - 4 a support layer; and
 - 5 a hardware layer.
- 1 3. The network of claim 2 wherein the control layer comprises:
 - 2 a user authentication (UA) control applet; and
 - 3 an application program interface (API) interface layer.
- 1 4. The network of claim 3 wherein the control applet finds, interprets and enforces a
2 platform security policy that defines how to handle security related events.
- 1 5. The network of claim 4 wherein the security related event is remote local area
2 network (LAN) wakeup event.
- 1 6. The network of claim 4 wherein the security related event is resume from suspend
2 event.
- 1 7. The network of claim 4 wherein the security related event is an AT attachment 3
2 (ATA-3) event.

1 8. The network of claim 2 wherein the interface layer comprises:
2 a UA API; and
3 a storage API.

1 9. The network of claim 8 wherein the UA API defines high-level function calls for
2 user authentication.

1 10. The network of claim 2 wherein the support layer comprises:
2 an authentication support component; and
3 a storage component.

1 11. The network of claim 10 wherein the support layer is developed by a service
2 provider.

1 12. The network of claim 11 wherein the support layer translates API calls received
2 from the interface layer into proprietary calls of the service provider.

1 13. The network of claim 10 wherein the support layer receives API function calls
2 from the control applet and returns the appropriate information.

1 14. The network of claim 10 wherein the storage component comprises a storage
2 plug-in.

1 15. The network of claim 10 wherein the authentication support component
2 comprises:
3 fingerprint plug-in;
4 a smart card plug-in;
5 a universal serial bus (USB) token plug-in; and
6 a remote boot plug-in.

1 16. A method comprising:
2 commencing a power on self-test a computer system;
3 authenticating a boot server by receiving a request from the boot server to access
4 an authentication stack at the computer system; and
5 downloading boot code from the boot server at the computer system.

1 17. The method of claim 16 further comprising:
2 authenticating the boot code; and
3 executing the boot code at the computer system.

1 18. The method of claim 17 further comprising passing control of the computer
2 system to a local operating system.

1 19. A method comprising:
2 receiving a request at a boot server from a computer system to download boot
3 code to the computer system;
4 accessing an authentication stack at the computer system; and
5 authenticating the boot server at a service provider server.

1 20. The method of claim 19 wherein authenticating the boot server at a service
2 provider server comprises accessing a remote plug-in at the service provider server.

1 21. The method of claim 19 further comprising downloading the boot code to the
2 computer system.

1 22. A method comprising:
2 awakening at a computer system;
3 authenticating a management server by receiving a request from the management
4 server to access an authentication stack at the computer system; and

5 downloading boot code from the boot server at the computer system.

1 23. The method of claim 22 further comprising:

2 receiving wake-up packets at the computer system from the management server

3 prior to the computer system being awakened; and

1 24. The method of claim 22 further comprising:

2 receiving management services at the computer system from the management

3 server; and

4 passing control of the computer system to a local operating system.

1 25. A method comprising:

2 transmitting wake up packets to a computer system from a management server;

3 receiving an authentication response at the management server from the computer

4 system;

5 accessing an authentication stack at the computer system; and

6 authenticating the management server at a service provider server.

1 26. The method of claim 25 wherein authenticating the management server at a

2 service provider server comprises accessing a remote plug-in at the service provider

3 server.

1 27. The method of 25 further comprising executing management services at the

2 computer system.

1 28. An article of manufacture including one or more computer readable media that

2 embody a program of instructions, wherein the program of instructions, when executed

3 by a processing unit, causes the processing unit to:

4 commence a power on self-test a computer system;

5 authenticate a boot server by receiving a request from the boot server to access an

6 authentication stack at the computer system; and
7 download boot code from the boot server at the computer system.

1 29. The article of manufacture of claim 28 wherein the program of instructions, when
2 executed by a processing unit, further causes the processing unit to:
3 authenticate the boot code; and
4 execute the boot code at the computer system.

1 30. The article of manufacture of claim 28 wherein the program of instructions, when
2 executed by a processing unit, further causes the processing unit to pass control of the
3 computer system to a local operating system.

1 31. An article of manufacture including one or more computer readable media that
2 embody a program of instructions, wherein the program of instructions, when executed
3 by a processing unit, causes the processing unit to:
4 receive a request at a boot server from a computer system to download boot code
5 to the computer system;
6 access an authentication stack at the computer system; and
7 authenticate the boot server at a service provider server.

1 32. The article of manufacture of claim 31 wherein causing the processing unit to
2 authenticate the boot server at a service provider server further causes the processing unit
3 to access a remote plug-in at the service provider server.

1 33. The article of manufacture of claim 31 wherein the program of instructions, when
2 executed by a processing unit, further causes the processing unit to download the boot
3 code to the computer system.

1 34. An article of manufacture including one or more computer readable media that
2 embody a program of instructions, wherein the program of instructions, when executed

3 by a processing unit, causes the processing unit to:

4 awaken a computer system;

5 authenticate a management server by receiving a request from the management

6 server to access an authentication stack at the computer system; and

7 download boot code from the boot server at the computer system.

1 35. The article of manufacture of claim 34 wherein causing the processing unit to

2 authenticate the boot server at a service provider server further causes the processing unit

3 to receive wake-up packets at the computer system from the management server prior to

4 the computer system being awakened.

1 36. The article of manufacture of claim 34 wherein causing the processing unit to

2 authenticate the boot server at a service provider server further causes the processing unit

3 to:

4 receive management services at the computer system from the management

5 server; and

6 pass control of the computer system to a local operating system.

1 37. An article of manufacture including one or more computer readable media that

2 embody a program of instructions, wherein the program of instructions, when executed

3 by a processing unit, causes the processing unit to:

4 transmit wake up packets to a computer system from a management server;

5 receive an authentication response at the management server from the computer

6 system;

7 access an authentication stack at the computer system; and

8 authenticate the management server at a service provider server.

1 38. The article of manufacture of claim 37 wherein causing the processing unit to

2 authenticate the management server at a service provider server further causes the

3 processing unit to access a remote plug-in at the service provider server.

1 39. The article of manufacture of claim 37 wherein causing the processing unit to
2 authenticate the boot server at a service provider server further causes the processing unit
3 to execute management services at the computer system.